

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent Application

TAKESHITA et al.

Application Number: 10/812,805

Filed: March 31, 2004

Title: APPARATUS FOR MICROINJECTION OF SAMPLE
INTO AMPHIBIAN OOCYTES

Attorney Docket No. BIR-A.0147

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450



Art Unit 1632

Examiner
Parus Jr., Peter

considered
8/19/06 (JW)

Considered
8/19/06 (MSN)

DECLARATION OF ONE SKILLED IN THE ART
UNDER 37 C.F.R. §1.132

Sir:

I, Jun DTOMO, am a co-inventor of the above identified application, and hereby declare as follows:

I have reviewed the above-referenced patent application and carefully considered the Examiner's rejection based upon US Patent No. 5,654,938 to Brown (hereinafter "Brown"). It is my conclusion that the invention achieved the "unexpected results" of at least providing high and uniform expression efficiency as discussed as follows, which were not intended, taught, or suggested by Brown. Specifically, it is my opinion that someone of skill in the art would not be motivated to inject mRNA into a plurality of oocytes at "an identical depth" from a surface of each of the oocytes in view of Brown.

The feature of the present invention is a plurality of amphibian oocytes into which a sample introducing mRNA is injected at an identical depth in the range of 0.02-0.1 mm.

As shown in the reference Fig. 1, the oocytes have been injected a sample including DNA at the identical depth in the range of 0.02-0.5 mm to have a high expression efficiency which is useful for screening (e.g., lines 24-27; p.13, lines 7-10 of the specification). In particular, Applicants discovered that the depth of 0.2 mm is the maximum injection depth at which one can obtain a higher change in the gene expression rate (>94%). See attached reference Fig. 1.

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